

September 9, 2022

BY ELECTRONIC SUBMISSION

Ann Carlson
Acting Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: **Request for Comments on Petition of General Motors, LLC for
Temporary Exemption from Provisions of Federal Motor Vehicle
Safety Standards**

Docket No. NHTSA-2022-0067

Dear Acting Administrator Carlson:

The Consumer Technology Association (“CTA”)® submits these comments to urge the U.S. Department of Transportation’s (“USDOT”) National Highway Traffic Safety Administration (“NHTSA”) to grant the petition of General Motors, LLC (“GM”) for exemptions to enable the further development of its driverless, zero-emission autonomous vehicle, for shared transportation services, known as the Cruise Origin (“Origin”) developed by Cruise LLC (“Cruise”). This is a momentous opportunity for NHTSA to accelerate the development of self-driving vehicle (“SDV”) technologies that have tremendous potential to expand mobility, reduce emissions, drive economic growth, and, above all, enhance safety on our nation’s roads and highways.

The Consumer Technology Association’s members are the world’s leading innovators – from startups to global brands – helping support more than 18 million American jobs, including many who are making the driving experience safer with self-driving vehicles. Our membership includes a wide range of companies working to bring self-driving vehicle innovations to America’s roadways. This includes vehicle and component manufacturers, software developers, and transportation platforms engaged in a multidisciplinary approach to this emerging and growing industry. U.S. consumers desire safety improvements, better mobility and less time wasted in traffic, with 66% indicating that they are interested in replacing their cars with self-driving vehicles, according to CTA research.

CTA believes that SDVs have the transformative power to positively impact lives. SDVs can reduce the number of accidents, primarily caused by human error, increase accessibility and mobility for the population (while reducing inequities), create new efficiencies by reducing traffic congestion, have a positive impact on the environment, and generate a wide array of jobs in a number of sectors and create substantial economic impact.

NHTSA has encouraged all entities, from traditional OEMs and suppliers to technology companies and new entrants, to seek use of its exemption authority to demonstrate the safety benefits of SDV technologies.¹ We appreciate the agency's commitment to using its regulatory tools to advance innovation and NHTSA's related streamlining and modernization efforts, including the amended exemption procedures.² GM's petition allows the agency to carry these efforts forward by giving them practical effect. This is a crucial step to validate the exemption pathway to support SDV testing and development, particularly for innovative vehicle designs like the Origin.

Safety. NHTSA projects that an estimated 42,915 people died in motor vehicle traffic crashes in 2021.³ This represents a 16 year high. NHTSA has also found that driver error is a factor in more than 94 percent of serious crashes.⁴ By diminishing the human role in the driving task, SDV technology has the potential to eliminate this risk and substantially improve overall safety. As the latest version of the agency's SDV policy guidance concludes, SDV technology's "potential to reduce deaths and injuries on the Nation's roadways cannot be overstated."⁵

Environmental Benefits. NHTSA has also found that "it is manifestly in the public interest to accelerate the development of electrically driven vehicles."⁶ Granting GM's petition would support extension of electric vehicle innovation to the emerging category of SDVs, proving the viability of electric-drive powertrains in a new motor vehicle category that could yield a range of environmental benefits in terms of reduced emissions and fuel consumption.

The Cruise Origin will specifically make a significant impact in the Administration's goal of decarbonizing transportation. The Cruise Origin is an all -electric, zero -emission

¹ 1 DOT/NHTSA Policy Statement Concerning Automated Vehicles: 2016 Update to "Preliminary Statement of Policy Concerning Automated Vehicles," <http://www.nhtsa.gov/staticfiles/rulemaking/pdf/Autonomous-Vehicles-Policy-Update-2016.pdf>.

² Temporary Exemption from Motor Vehicle Safety and Bumper Standards, 83 Fed. Reg. 66,158 (Dec. 26, 2018) (to be codified at 49 C.F.R. pt. 555).

³ Available at: <https://www.nhtsa.gov/press-releases/early-estimate-2021-traffic-fatalities#:~:text=NHTSA%20projects%20that%20an%20estimated,Fatality%20Analysis%20Reporting%20System's%20history>.

⁴ U.S. DEP'T. TRANSP., PREPARING FOR THE FUTURE OF TRANSPORTATION: AUTOMATED VEHICLES 3.0 at 3 (2018) (hereinafter, "AV 3.0").

⁵ Id. at 1.

⁶ Think Technology AS; Grant of Application for a Temporary Exemption from the Advanced Air Bag Requirements of Federal Motor Vehicle Safety Standard No. 208, 74 Fed. Reg. 40,634, 40,636 (Aug. 12, 2009).

vehicle, and will continue Cruise's 100% electric fleet commitment. Cruise is investing heavily in EV charging and will continue to do so as Origin production scales up. Cruise utilizes 100% renewable energy to power its fleet. In California, Cruise is sourcing its renewable solar energy credits directly from family farms in the Central Valley through its Farm to Fleet initiative. The Cruise Origin is not a vehicle one person owns, but a shared experience, seating up to 6 passengers, helping to reduce vehicle miles traveled (VMT) and further supporting Cruise's environmental goals.

Employment Benefits. GM's petition will allow the company to maintain and grow its existing workforce and support additional employment opportunities for this American made vehicle. The exemptions will allow GM to continue the commercialization of the Origin, which in turn will yield revenue to support this U.S. job creation. Specifically, Origin manufacturing will contribute to more than 2,000 union jobs at Factory Zero and contribute to new supplier investments as nearly all Origin components are unique to the vehicle and cannot be sourced from other lines. NHTSA has previously found that the public interest is served by precisely this dynamic. A CTA report found that the consumer technology industry supports 18.2 million American jobs and provides \$1.3 trillion in annual wages.⁷ Employment driven by SDV innovation represents a significant and rapidly growing segment of this overall total. Regulatory frameworks and decisions that support SDV commercialization are essential to realizing the industry's employment potential.

Economic Growth. Granting GM's petition would drive substantial economic growth. For GM and Cruise, particularly, "The Origin will be produced at GM's newly renovated and opened Factory ZERO located in Detroit-Hamtramck, Michigan, which is the Company's first assembly plant fully dedicated to EV and SDV manufacturing. GM will be investing \$2.2 billion to retrofit this plant for the production of autonomous and electric vehicles."⁸ Likewise, "this facility will contribute to over 2,000 union manufacturing jobs— with the Origin serving as one of the first major production lines at the site."⁹ The requested exemptions are part of a path to commercialization that could lead to the development of a vibrant market for GM's products and services.

In addition, the company is part of a broader SDV ecosystem that has tremendous economic potential. CTA's research has shown that SDV technology is expected to contribute \$7 trillion to the global economy annually by 2050—a substantial portion of which will be generated in the United States.¹⁰ These economic projections reflect the aggregate sum of many individual contributions by companies like GM and Cruise. By

⁷ CONSUMER TECHNOLOGY ASSOCIATION, U.S. ECONOMIC CONTRIBUTION OF THE CONSUMER TECHNOLOGY SECTOR (APR. 2019), <https://www.cta.tech/Research-Standards/Reports-Studies/Studies/Supplements/Economic-Impact-Study.aspx>

⁸ Press Release, General Motors, Detroit-Hamtramck to be GM's First Assembly Plant 100 Percent Devoted to Electric Vehicles (Jan. 27, 2020).

⁹ Id.

¹⁰ CONSUMER TECHNOLOGY ASSOCIATION, ECONOMIC IMPACT: SELF-DRIVING VEHICLES at 10 (DEC. 2017), <https://www.cta.tech/Research-Standards/Reports-Studies/Studies/2018/Economic-Impact-Self-Driving-Vehicles.aspx>

advancing GM and Cruise’s development program, granting its petition will place the company in the best position to contribute to this broader economic growth in the United States.

Global Competition. Our nation faces fierce global competition in the SDV sector. China prioritized autonomous transportation in its high-tech infrastructure program. The European Union and other nations are also aggressively moving forward. The nation that leads the world will claim the economic benefits and high-skill jobs that SDVs produce. The Global Autonomous Vehicle Market was valued at \$54 billion in 2019 and is estimated to garner an additional \$2,044 billion by 2030.¹¹

Public Confidence. USDOT has highlighted the need to address public concerns about SDVs and communicate the benefits of automation.¹² CTA’s research has confirmed that consumers are eager to learn more about this technology.¹³ Among other issues, U.S. adults want to learn more about the cost of purchasing and maintaining a self-driving vehicle, as well as how today’s roads and other public infrastructure support both human-driven and self-driving cars operating together.¹⁴ GM has envisioned a use case for its technology that builds public awareness and confidence by design. By allowing consumers to experience SDV technology firsthand, granting GM’s petition will directly advance the Department’s educational priorities.

Accessibility. The Origin vehicle was crafted and built by GM for Cruise, which is also working to develop versions designed to be accessible to wheelchair users or those with reduced mobility. Cruise intends to continually design and perform user research development focused on wheelchair users. Self-driving vehicle technology, through the scale of the Cruise Origin has the potential to help senior citizens, the blind community, injured persons, and others – providing access to transportation to more people in underserved communities across the nation.

Data Sharing. CTA supports the voluntary sharing of data that can help improve SDV safety and performance. We are pleased that NHTSA has also similarly endorsed a voluntary approach to data exchange, and affirmed that “[a]ny exchanges of data should respect consumer privacy as well as proprietary and confidential business information.”¹⁵ To the extent that GM and NHTSA can agree upon a framework for the voluntary sharing of data about exempted vehicles, granting the petition could provide NHTSA with

¹¹ See, Global Outlook for the Autonomous Vehicle Market to 2030 - Sale of Autonomous Vehicles is Forecast to Reach 58 Million Units by 2030 (yahoo.com), <https://www.prnewswire.com/news-releases/global-outlook-for-the-autonomous-vehicle-market-to-2030---sale-of-autonomous-vehicles-is-forecast-to-reach-58-million-units-by-2030-301198944.html>

¹² AV 3.0 at ii.

¹³ CONSUMER TECHNOLOGY ASSOCIATION, ECONOMIC IMPACT: SELF-DRIVING VEHICLES at 10 (DEC. 2017), <https://www.cta.tech/Research-Standards/Reports-Studies/Studies/2018/Economic-Impact-Self-DrivingVehicles.aspx>.

¹⁴ *Id.* at 15.

¹⁵ AV 3.0 at 31–32.

invaluable real-world information to support its ongoing oversight and policymaking activities in this area.

As a whole, these factors overwhelmingly support the conclusion that granting GM's petition would substantially advance the public interest and motor vehicle safety. The deployment GM has proposed would yield substantial public benefits in and of itself and is also an early step in the development of a broader industry ecosystem that will compound those benefits many times over. More, GM's petition satisfies the factors that NHTSA has looked to in establishing the public interest as part of past exemption decisions. This is a landmark opportunity for NHTSA to advance its commitment to using its exemption authority to facilitate SDV testing and development.

As SDV technology continues to develop, NHTSA has well-established policies and procedures for evaluating exemption petitions and all stakeholders testing or deploying SDV technologies should be able to avail themselves of the same federal policies and exemption pathways. We encourage the agency to follow this precedent as much as possible and avoid reading new or additional requirements into the exemption statute and regulations or NHTSA's approach to implementing them that would not have been anticipated by the applicants. Predictable and uniform application of NHTSA's rules and regulations is essential to cultivate a policy environment that encourages efforts to realize the safety potential of SDV technology. NHTSA can also use data from exemptions to complete rulemaking to modernize the remaining FMVSS for vehicles with novel designs, including standards that assume a human driver inside the vehicle will be able to control the vehicle.

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Thank you for your consideration of these comments. We view NHTSA's review of GM's petition as another positive step forward in developing a pro-innovation policy framework around SDV technology. As described above, CTA strongly believes that granting the petition would advance the public interest by enhancing safety, environmental benefits the economy, and mobility for all Americans.

We look forward to your decision and to continued collaboration between government and industry in bringing SDV innovation to the nation's roadways. Please do not hesitate to contact us with any questions you may have

Please let us know what additional assistance or information we can provide.

Sincerely,

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